

2010 ATMI National Conference

Abstracts

updated August 23, 2010

Atticks, Barry

Logic Studio 9: Move out of the Garage(Band) and into the Professional Home Studio

Everyone knows GarageBand is a great tool, which has many applications in music education. However, if you are ready to upgrade your arsenal of music production tools by taking the next BIG step in sequencing and digital audio programs but unsure how to proceed, this session is for you. Logic Studio 9 is a major player in the music production world and its advanced capabilities will open up a new set of creative opportunities for any music educator or musician. So, get your feet wet by diving into an exciting hands-on comprehensive introduction to one of the world's most widely used professional music production software packages.

Bauer, William

A Conceptual Framework for Technology-Assisted Music Teaching and Learning

The purpose of this presentation is to propose and discuss a research-based conceptual framework for integrating technology into music teaching and learning. Building on the work of Shulman (1986), Technological Pedagogical and Content Knowledge (TPACK) (Mishra and Koehler, 2006) provides a way to conceptualize and actualize the knowledge, skills and dispositions educators need to be able to effectively integrate technology into teaching and learning. Technology-assisted music teaching is a complex, ill-defined "problem" with which teachers may struggle. The TPACK framework has the potential to take the focus off of technology itself and place it on ways in which technology might assist students in achieving curricular goals. Examples of ways in which TPACK can be developed by pre- and in-service music teachers, and implications for research and teaching will be discussed.

Brisson, Eric

Using Moodle and Flash for Undergraduate Music Theory Instruction

This presentation demonstrates the use of newly built Moodle question types for online undergraduate music theory instruction and assessment. These question types allow quick creation of online assignments and exams where student answers are entered in a Flash-based graphical interface. Exercises to be featured include: writing key signatures, scales, harmonic functions (including diatonic triads, secondary dominant/leading-tone chords, Neapolitan chords, augmented sixth chords, altered dominant chords and extended chords), and figured bass realization in four part chorale style with instant feedback and grading addressing a large number of basic voice-leading errors.

Conklin, N. Mason; Ajero, Mario

Google Wave: A New Paradigm in Internet Communication and Collaboration

As an emerging internet communication medium, educators the world over are looking for ways to integrate Google Wave into the educational experience. Unfortunately, Google Wave is not exactly intuitive, and its truly paradigm-shifting potential is not easily evident at the outset. In this session, attendees will get a first-hand look at Google's new web application as well as a foundational tutorial in getting started with Google Wave. The presenters will demonstrate their favorite Wave gadgets and bots as well as real-world applications for Wave in the music educator's life.

Cotner, John

Teaching Master's-Level Online Graduate Music Theory: Problems & Solutions

The purpose of this presentation is to address pedagogical problems and solutions related to the design and delivery of quality graduate music theory and analysis at the Master's level. First, my discourse outlines explicit technical and practical challenges delivering advanced music-theoretical subject matter in an online environment. Second, I demonstrate specific ways that Camtasia screen recording and other instructional technologies such as Blackboard enable me to effectively communicate concepts and demonstrate skills with similar exactitude as obtained in face-to-face settings. Third, I frame this presentation within the context of ongoing educational-philosophical debate, arguing that, in order for an online instructor to deliver materials comparable in quality, to face-to-face course lessons and textbooks, s/he must embrace technologies which simulate a level of immediacy and precision necessary for students to progress at an expected pace, thereby meeting the criteria of a graduate-level curriculum in music theory.

Dalby, Bruce

A Software Program for Developing Rhythm Skills Through Sounding of Rhythm Syllables

This session will consist of a demonstration of a computer program designed to provide effective and comprehensive practice of rhythm skills through a variety of drills employing rhythm syllables sounded through digital audio. The user may choose from six rhythm syllable systems. All "regular" meters and various versions of 5/8 and 7/8 are implemented. The difficulty level of patterns is also user-selectable. Activities include echoing patterns, reading, pattern dictation, performing patterns, and quizzes.

Dammers, Rick

Technology-Based Music Classes in High Schools in the United States

In this session, the results of a national survey of high school technology-based music classes will be presented. The results address the extent to which high schools offer these courses, the impact of geographical and socio-economic factors, the curricular nature of these classes, the hardware and software used in these classes, and the backgrounds of the students and teachers. Implications for teacher education and future research will be discussed.

DeBenedetti, Gilbert

Teaching Listening Skills in Musical Contexts

In this session participants will learn to teach listening skills with audio clips of live performances. This demonstration is based on the assumption that students should listen for musical elements in the context of the many textures and styles that they encounter throughout their lives. Participants will view two websites containing short audio excerpts organized by theoretical concept and downloadable for playback in the classroom. Professors will also be able to show students that they can practice with these excerpts on their iPhones and iPod Touches. Participants will then hear downloadable melodic dictations accompanied by ensembles, some of which are excerpted from live performances. Lastly, participants will learn to create their own library of excerpts to illustrate concepts in their lessons. The convenience of playing dictations, intervals or triads on the piano, with its relatively limited timbres, is now matched by the ease with which digital recordings can be created, edited and played.

Dorfman, Jay

Mobil Solutions for Music Technology Labs

Most educators in today's climate suffer from limited resources. Mobile technology labs can provide solutions to limited funds, and perhaps more importantly, to the constraints of limited space. By "going mobile," music technology classes do not need to take up valuable space, and can provide a realistic and flexible learning environment.

In this session, the presenter will discuss the planning and implementation of a mobile lab, physical and technical considerations, and practical realities. Come share your ideas about mobile music technology labs.

Drews, Michael

Technology-based Strategies for Comprehensive Musicianship

Technology-based Strategies for Comprehensive Musicianship is a presentation detailing the creation and implementation of a comprehensive sequence in basic musicianship and music technology. The courses in this sequence are designed to provide fundamentals in music theory, aural training, keyboard facility, and music technology. These subjects are combined, rather than taught separately, to provide an immersive learning environment that reinforces course content with multiple contexts and viewpoints. Another significant aspect of the curriculum is topics presented in class are directly linked to a relevant application of music technology. This is intended to teach important technology skills and also acclimate the student early in the degree program to utilizing technology. The presentation will feature an overview of the curriculum, demonstrate student projects and highlight successes and challenges experienced during the first year of the curriculum's implementation.

Frankel, James (Facilitator); Dammers, Rick; Williams, David B.

21st Century Music Technology Labs: Where Are We Headed?

This panel session discussion will examine the latest trends in music technology labs at the university level, and will focus on mobile and permanent lab environments.

Frazier, Bruce

Developing an Electronic Briefcase Using Apple's iLife

A beginner's tutorial for managing educational materials in a variety of digital formats using Apple's iLife package of media management software. Topics in this hands-on session include video and audio capture, basic video editing techniques, adding transitions and titles, working with audio, sharing and exporting files, DVD assembly, and burning a disc of the completed project. iMovie, iTunes and iDVD will be the featured applications.

Frazier, Bruce

From Disc to Desktop and Beyond!

From Disc to Desktop and Beyond! In this hands-on session, participants will explore selected popular software applications for capturing video and audio excerpts from read-only media, then convert these assets for use in instructional materials and export to the Web. The session will include a discussion of common video image and compression formats, and tutorials for applications such as Handbrake, Cinematize, QuickTime, and iTunes.

Freedman, Barbara

Recreating the Secondary General Music Classroom for the 21st Century Learner: Teaching Music Through Composition with Technology

In today's world of music education, old-fashioned, lecture-based music appreciation and general music classes lack relevance for students and, frankly, just don't cut it anymore. Regardless of prior music education, or lack of thereof, students have access to sophisticated music software, which is either free or inexpensive, and they are already composing their own music. All students can have meaningful hands-on applied learning experiences that will impact not only their music experience and learning but also their understanding and comfort with 21st century technology. This presentation will examine elements of a curriculum that teaches composition and theory skills for beginning students to be successful composers and creators of music. Techniques on use of the software, lesson plans on composition and theory skills, techniques for weaving in music history and how to integrate music of other cultures will be discussed. All highlighted with examples of student compositions.

Gonzales, Cynthia I.; Hurt, Charles

Looking for an Aural Skills Tutor? Try Smart Music!

SmartMusic is well known as an electronic practice aid used primarily by elementary and secondary instrumental students. Less known is that SmartMusic can also be an electronic tutor for college-level aural skills students. This demonstration will model how to employ the program to improve sight singing and rhythm reading. A primary focus will be the assessment tool that records a student performing an on-screen musical excerpt. When the student finishes, the assessment tool notates what the student performed along side the score they read. Pitches and rhythms performed correctly are clearly visible, as well as the errors. The immediate, visual assessment provides valuable feedback for the student. Video clips will show students using the SmartMusic assessment tool to record and verify accuracy when sight singing and reading rhythms. Qualitative data includes student response to using the program. Quantitative data compares the results of pre-test and post-test sight singing and rhythm reading.

Greher, Gena

SoundScape: An Interdisciplinary Music Technology Intervention for Adolescents and Young Adults on the Autism Spectrum

A program called SoundScape was created as an interdisciplinary university based music class by two professors in the Departments of Psychology and Music. The group sessions are run by graduate and undergraduate students in the music and psychology departments. Previous research demonstrates that listening to, playing, and producing music can be very beneficial in a range of areas, including those frequently seen in ASD such as stress and anxiety. Our music program provides an opportunity for young adults on the autism spectrum to meet others who are very similar to themselves, and who they could potentially make friends with.

Hall, Richard; Riepe, Russell

Performance: *Texas Mysterium for Modern Music*

The many-colored musical poesy performed by this electro-acoustic ensemble pays homage not only to celebrated contemporary composers, but also to the new and often experimental works handed in by students and faculty from universities throughout the country. Public concerts embrace a wide variety of styles and media including dance improvisations and live electro-acoustic pieces utilizing real-time digital sound processing with laptop computers and video projections. These performances have taken place at musical and improvisational conferences and festivals, art museums and universities throughout the country and Europe.

Haymond, Keith

We Deliver! - An aural skills web site that delivers graded results to both student and professor!

This demonstration will explore an aural skills web site. The distinctive feature of this web site is its ability to e-mail graded results. Furthermore, results can be e-mailed simultaneously to both the user and to a third party. Thereby a professor can assign online ear training homework and receive the graded results via e-mail.

Hepworth, Matt

Audio Recording, Editing, and Sound Reinforcement Techniques that Every Student and Teacher Should Know

No matter whether your students end up doing weekend wedding gigs, playing in church, pursuing a career as a recording artist, teaching applied music, or virtually anything else as a music professional, your students need to become proficient in the areas of audio recording, editing, and sound reinforcement. Professional quality and near professional quality hardware and software is available within the budget of typical musicians. In order to be competitive in the modern gigging world, young 21st century musicians must have basic skills in these areas. Join this entertaining session for an examination of easy-to-use and affordable hardware and software tools that provide professional results as well as the pedagogical techniques for introducing these tools to college music students.

Hosken, Dan; Lipscomb, Scott; Greher, Gena

Panel Discussion: Music Literacy and Music Technology

Members of this panel will discuss various perspectives on the relationship between music technology and the various definitions of music literacy in higher education. Can technology hinder literacy? Is traditional music literacy irrelevant given the technological tools available for music making? Might technology foster a post-musically-literate culture in higher education? Is all of this good, bad, or merely inevitable?

Huff, Douglas

TV Commercials as Links, Lessons and Electronic Learning Projects in Music Appreciation Classes for Non-Music Majors

In the music appreciation classroom, television commercials that feature classical music can be effective links from the familiar to the unknown, spring boards for lessons in musical history and culture, and electronic learning projects when students create their own commercials. My electronic poster presentation begins with three commercials that I regularly show to my music appreciation classes for non-majors: 1) McDonald's / Tchaikovsky's 1812 Overture; 2) Hyundai / Beethoven's 5th Symphony; and Air Jordan / Mozart's Requiem. Each commercial is followed by a set of prompts that provide connections to the music, as well as information about the music itself and its usual context. The last prompt asks how these commercials could be more effective, and the ensuing discussion leads to the guidelines, requirements, and grading rubric for the students to create their own TV commercials on DVD. The presentation concludes with three commercials created by students.

James, Sandra; Pardo-Tristán, Emiliano

The Wii Mejorana Instrument: Panamanian Folklore Meets Global Technology

New hybrid sonorities, produced by dissecting and re-synthesizing original folkloric material, can bring novel timbres to a composition. The mejorana is a small, rustic five-stringed guitar-like instrument unique to Panama on which much of the folkloric music of the country is played. Transcriptions and analyses for this study were drawn from the composer's recordings of musicians who have performed mejorana music since childhood. Audio selections and analyzed material were presented to the engineer to build new digital instruments, using a computer running pd (pure data), MIDI keyboard, and a Nintendo Wii Remote. A generic instrument was first developed, so that the pd code and MIDI mappings could be modified to create each new instrument. Our interest is in the collaboration between composer and computer engineer, to create modern compositions that speak with a Panamanian accent, but without mimicking its original source.

Kersten, Fred

Developing Multimedia Home Practice Online Accompaniments Using Free trakAxPC

This presentation illustrates how trakAxPC, a free, powerful, editing and recording multimedia application for PC, can be utilized to develop multimedia online accompaniments for home practice opportunities.

Kerstetter, Kathy

Bringing Technology into K-12: What and how are future teachers learning to teach with technology?

Research into the curricular offerings for music education majors is sparse. Price and Pan (2002) found that fewer than half (39%) of the schools required music technology training specific to music education. Overwhelmingly, the content of the technology courses that are required include music notation software, MIDI, music sequencing software, Internet, and hardware. This session will review data gathered from undergraduate music education majors at NASM accredited institutions regarding their technology training and the TI:ME Areas of Competency. Additionally, curricular offerings and requirements from NASM accredited institutions will be presented.

Kissinger, Jason

Étude - A Digital Anthology of Music

When teaching music theory, it is necessary to continually relate abstract concepts to concrete evidence through the use of real excerpts from repertoire. Although some resources and collections are available, finding suitable examples for students to study can often be a challenging and time-consuming process. Aimed at educators, Étude is a comprehensive and user-friendly, web-based anthology of music that solves this problem. As a digital application, Étude allows for quick searches based on multiple criteria as well as cross-references to other concepts. Its extensive library provides a wide array of excerpts already formatted and ready to be inserted into any assignment or handout. In addition, it provides an answer key to insure appropriateness and utilizes forums to share methodologies and teaching approaches. This powerful tool helps educators find the most relevant, insightful, and comprehensive music excerpt and allows students to make deeper connections with real music.

Lipscomb, Scott; Bauer, Bill

Effective applications of technology in the music classroom: Results of a national action research project

The purpose of this presentation is to report the results of a year-long project in which eight action research studies were carried out at disparate locations across North America, each involving a music teacher, technology integration, and a research mentor. The goal of the project was to create a much-needed body of research related to music technology that will identify productive practices, informed by student achievement and professional development opportunities for the purpose of assessing the impact on music education and student music-making experiences. Attendees will learn about processes involved in this project: collaborative conception of the project itself, acquisition of essential grant funding, creation of the online action research tutorial, implementation of the project ideas in real-world school settings, and, most important, outcomes of each of the selected action research plans. The presenters will provide insight into the benefits and challenges associated with such a large-scale music technology project.

Litterst, George; Kirk, Shana

Let Your Fingers Do the Talking: An Intelligent, MIDI-Driven Electronic Blackboard for On-the-Fly Illustration of Musical Concepts

From your brain to your MIDI keyboard to your projected computer display: Classroom Maestro is an intelligent musical assistant who stands ready to illustrate musical concepts on the fly. Classroom Maestro provides you with an on-screen musical staff, keyboard, and instrument fingering displays. Just play what you intend to show, and Classroom Maestro does the rest, providing engraver-style formatting and optional analysis.

Manzo, V.J.

Developing Interactive Music Systems Through Max/MSP

Using the programming language Max/MSP and the EAMIR Software Development Kit, attendees of this workshop will learn to program music applications, even if they have had no programming experience. Those who may find this workshop particularly useful are music educators looking to supplement their lessons with interactive instructional tools, music therapists looking to develop adaptive instruments or measurement tools with which to conduct research, as well as composers and performers looking to combine their existing musical interests with new media. There are no prerequisite programming skills required at all. The workshop will take individuals without any prior programming experience through a series of small projects through which they will immediately begin to develop software applications for practical music instruction, composition, and performance.

McConville, Brendan; Murphy, Barbara

Facebook vs. Blackboard: Results of a Study Comparing Course Management Tools in Undergraduate Music Theory Courses

This presentation will report on a research study, undertaken during spring semester, 2010, comparing Facebook and Blackboard as course management systems. For this study, students in one Theory IV class will use Blackboard and students in another Theory IV class will use Facebook; students will use only the system assigned to their class. Topics covered in Theory IV will encompass 20th century analytical techniques, including post tonal approaches to pitch and rhythmic organization, compositional trends, and textural analyses. Both course management systems will be used in exactly the same ways; we will use: 1) blogs/threaded discussions, 2) web links (i.e., audio, video, and document links), and 3) online Chat sessions. Statistics will be gathered from both systems and from student questionnaires. The system used will also be compared to the students' grades to determine if there is any link between the type of system used and the students' achievement.

Menoche, Charles

Loop Software in Composition Assignments: Creative Approaches to Circumventing Limitations of the Tools

The pedagogy of electro-acoustic music is inextricably intertwined with ever-changing technologies. Inspired by pioneers such as Karlheinz Stockhausen (in works such as *Telemusik*) and virtuosi turntablists such as Christian Marclay and Grandmaster Flash (Joseph Saddler), popular and commercial composers have been using pre-recorded musical materials (consisting of beats, bass lines, riffs, and other musical elements) to create new works composed exclusively of pre-existing materials. Driven by these new approaches to composition, a variety of new music software tools are now widely available, including Acid, Garageband, Ableton Live, and Reason. As with all areas of music technology (including traditional music notation), limitations offer interesting challenges to the composer. The solution is not to reject technological limitations but rather to find ways to overcome them. This presentation will demonstrate that, for the creative composer and teacher, loop-based resources can avoid paint-by-the-numbers results, turning it into a valuable compositional tool.

Menoche, Charles

New Paradigms in MIDI Sequencing and Audio Recording: Ableton Live as the Twenty-first Century Composition and Improvisation Tool

When developer Ableton first introduced Live in 2001, it was the most significant innovation for MIDI Sequencing/Audio Recording software to enter what had become a relative mature technology resource. Although Ableton Live has become a popular tool for a variety of popular and experimental musicians, many in education remain relatively unfamiliar with the software, its functionality, and its strengths and limitations. Drawing upon this presenter's experience, Live offers musicians, composers, and teachers an innovative and comprehensive set of tools for MIDI and audio sequencing. This hands-on training session will walk novice users through the creation and editing of a simple composition using Ableton Live (from start to finish within an hour).

Moreno Sala, Maria Teresa

Database of excerpts of the musical repertoire

The goal of this project is the creation of a database with score, audio and video documents of excerpts of the musical repertoire representing the main music styles and languages to be known, according to the different professional needs of music students (classical, jazz, pop, world music, children music). This database does provide many concrete examples of the concepts studied in class and will help to develop an actual competence in the area of music dictation or transcription. Most often dictation exercises used in ear training classes are specifically designed for the course purposes but do not necessarily possess "musical" qualities. Working with excerpts of the real musical repertoire could stimulate and motivate the students to do this type of task and help them develop the professional competences they need to acquire.

Moreno Sala, Maria Theresa; Nguyen-Dang, Thien-Ly

A Software for Oral and Auditive Acuity Development

Ear training has benefited over the last years from various technological support media that assist students in developing their music writing skills. However, the technology that targets skills requiring real-time interaction (such as oral skills, solfeggio and sight reading) are somewhat less mature, and therefore a first prototype of such a software, classified as a "Software for Auditive Acuity Development", as constructed in order to steer future research efforts towards improving this area of technology. This software confronts the user with the notion of pitch accuracy in a melodic, harmonic and melodic-harmonic context. Based on the concept of real-time feedback, the software interacts with the user, showing the magnitude and direction of the pitch error using a graphical feedback line superimposed over the music that the student must "sing" or "play". This will form an original and effective toolset for the purpose of helping students to understand and to improve their oral skills.

Phillips, Scott; Bowman, Judith; Rees, Fred

Exploring Music Technology at the Graduate Level

This panel will discuss music technology curriculum development at the graduate level. There has been considerable development of music technology offerings at the university level over the past ten years. Some researchers have called the first students to study music technology at the undergraduate level the "fourth generation" of music technologists. As these post-graduates consider additional study, the "fifth generation" of music technologists is poised to take shape. However, a lack of graduate programs in music technology raises many questions and concerns. The panel of experienced music technology educators will discuss issues such as the terminal degree, the development of tenurable positions, interdisciplinarity, specialization, and others related to the future of music technology education.

Phillips, Scott

Facts About Undergraduate Music Technology Programs in the United States

This paper expands on recent research that identified over forty music technology bachelor degree programs in the United States that are accredited by NASM. This paper builds on the existing research and delves into important information about these programs including qualifications of instructors, similarities and differences between BA, BM, and BS programs, and other factors. The paper will address the most recent edition of the NASM handbook which includes several pages of guidelines that new music technology programs will need to address. It will consider the degree to which these standards align with the goals and desires of the music technology pedagogy community. As more universities consider offering courses of study in music technology, the ability to learn from what others have done becomes increasingly important and the creation of an online directory of music technology programs will be discussed.

Rees, Fred

Employing Adobe's Connect Pro Meeting Software for Blended Learning with Music Students

This session will demonstrate the various functions of Adobe's Connect Pro, a multi-faceted presentation and communication tool that enables on campus and on line graduate music students to participate in live instruction together. Sharing of student presentations online, transmitting audio and video transmission, and videoconferencing will be a part of this event. Communications via video and chat between instructor, on campus and online student populations will be demonstrated. The session will also include a general assessment of how students and faculty use of Connect Pro changed over the course of a typical semester of teaching.

Repp, Richard

Trends in nonmusician teacher choices for using music in the classroom

Several groups of mostly inservice teachers in all disciplines completed a series of trainings that, in part, encouraged them to include music-related projects into their curriculum. The projects all contained original music produced in Apple's GarageBand software. The presentation will feature excerpts of teacher projects in several categories, as well as discussions of how to create meaningful teaching materials using music and audio. Complete statistical analysis and qualitative data will shed light on teacher attitudes toward using music in their teaching. Some teachers will also provide reports on how the projects fared in the classroom.

Riley, Raymond***Advances in Audio Massage: A State of "Flex"***

This demonstration/workshop will present an overview of Logic Studio with a focus on audio manipulation and quantizing using the Flex Modes and Tools. Participants will have the opportunity to work with several audio examples (to be provided), each of which presents unique problems best addressed by utilizing the powerful Flex architecture in Logic Pro.

Root, Jena***Interactive Learning in a Flash -- Without Learning Flash***

The past decade has seen a sharp rise in the number and variety of options available for computer-assisted music study, both online and offline, commercial and free. Many teachers, however, may wish to create custom exercises, drills, and quizzes using their own content consistent with their own pedagogical styles. Participants in this session will learn how to create interactive, student-centered music lessons using Adobe Captivate 4. Captivate allows the user to combine notation, sound, and text and export to .swf (Flash) format, without the need for the much more time-consuming and costly Flash software. This workshop is appropriate for teachers who have little or no experience with multimedia software, who are interested in designing their own multimedia lessons (i.e. "Flash movies") for an online course, and those who simply want to create their own drills and quizzes to supplement a traditional face-to-face class.

Rudolph, Thomas***The New Look of Finale 2011***

This session will demonstrate many of the new and improved features in Finale 2011 including Lyrics, Chords, Staff Layout, Percussion Notation, Fonts, Playback and Education Worksheets. Lyrics now appear as they'll print out and are automatically spaced with engraver rules; Chord entry and chord playback have been updated and simplified; new Staff Layout options make it easier to add, hide and edit staves; improved Percussion note entry makes creating pitched and non-pitched percussion parts easier; Finale AlphaNotes font automatically places note names or solfege syllables inside noteheads; and there are hundreds of new Education Worksheets.

Ryan, Thomas***An investigation into the effectiveness of pitch-tracking software in teaching sight-singing.***

Helping students to improve their sight-singing ability continues to challenge many aural skills instructors. A significant body of research is ongoing and seeks to find the aptitudes and component skills necessary for competent sight-singing. One aspect that has received little attention is the fact that without an instructor or tutor present, students often have difficulty improving their sight-singing because they are unable to hear, and hence diagnose, what they are doing incorrectly. This study will investigate the potential of pitch-tracking software such as Smartmusic, Singing Coach Unlimited, and Audio Score Ultimate to show the student where errors are being made, so they can be corrected more readily, allowing more independent and productive sight-singing practice.

Schüler, Nico***New Online Tools for the Analysis of Modern Music***

This presentation will demonstrate new (and free) online tools for the analysis of modern music. While these online programs can be used to support most college textbooks on the analysis of modern music, the programs calculate (a) possible scales that a given (input) pitch collection may belong to, (b) possible chord types that a given (input) pitch collection may belong to, (c) whether (input) pitch collections are symmetrical and, if so, the axis of symmetry, (d) the 12-tone matrix from a given 12-tone row and allow the user to search for possible row forms with an input of at least two notes, (e) normal forms and prime forms of given (input) sets as well as various similarity relations. The e-poster presentation will demonstrate the actual online tools and let conference participants experiment with the tools.

Shepard, Brian***Echo Control for the High-Performance Network Musical Videoteleconference***

As more music institutions get connected to high-performance networks like Internet2 and the National Lambda Rail, they are attempting to leverage their videoteleconference (VTC) capabilities for music use. There are a number of VTC systems in use today that allow participants to send live video and audio back and forth to each other.

Unfortunately, most current VTC systems are not designed to handle the specific frequency and quality needs of music, and those that can accommodate these needs end up ruining the musical quality by applying "speech-specific" echo control to the audio. This presentation will demonstrate echo control for the MUSICAL videoteleconference. Techniques will be shown, described, and explained that allow VTC participants to remove echo from their sessions while maintaining full audio fidelity. Part of the presentation will include a description of the new echo-control software written specifically for the musical VTC environment: EchoDamp.

Smith, Kenneth***Using distance education to remediate the music fundamental skills of incoming university freshmen.***

Online instruction is an ideal medium to address the remediation of incoming freshmen. Students that are not proficient in the principals of music fundamentals usually have to remediate this knowledge before entering a beginning course in music theory. This presentation will present evidence that online learning can be used to remediate students' knowledge of music fundamentals prior to arriving on campus. The addition of this course has also increased the enrollment of non-majors in music electives. University technical support is vital to student satisfaction and achievement in the course. Course content is taught using a variety of media including video lecture segments, textbook readings, notation exercises, online quizzes, discussion board assignments, and proctored exams. Timely teacher interaction with the students is an important aspect of providing effective instruction an maintaining student satisfaction.

Steele, Glenn

Assessing Percussion Performance – New Tools for Observing and Tracking Progress

Music performance is multi-layered and complex. Percussionists must develop advanced techniques on multiple instruments. The percussion teaching/learning dynamic can be greatly enhanced by incorporating new technology and using a systematic based on diverse models. The increased demand for accountability in education has inspired an awareness of the need for reliable methods for evaluation teaching and performing. Evaluation, measurement and assessment in the Arts remains controversial with the argument centering on attempts to "quantify" (or "objectify") that which is "qualitative". End-of term evaluations of percussion performance are common; semester grades, auditions for ensemble entrance/placement and competitions. These "summative" evaluations imply prior work and preparation. This paper will demonstrate a way to incorporate some of the evaluation methods used for summative evaluations with new assessment tools into a matrix for measuring weekly individual progress.

Sterneman, Walter

The Open Source Revolution: MuseScore

MuseScore is an open source notation editor designed to provide an alternative to the widely used software packages Finale and Sibelius. MuseScore V0.9.5 (released on August 14, 2009), available for download from <http://www.musescore.org/> provides cross-platform functionality for Windows, Mac OSX, and Linux. MuseScore features a WYSIWYG editor, MusicXML and MIDI support, and has been translated into more than 20 languages. It also offers unlimited staves and four voices per staff. While advanced in many areas of score creation, MuseScore does have some bugs and lacks some of the refinement of the corporately produced applications. Fortunately, MuseScore is served by an active development community, and many of the issues found have either already been addressed (in Beta), or are currently being tested. MuseScore is well on its way to becoming a viable option as a full replacement for Finale or Sibelius, and already outperforms Finale Notepad and Sibelius Student.

Stevens, Daniel; Burton, Suzanne

From Bics to Bytes: Moving Music Assessment into the 21st Century

If the process of assessing music students in higher education programs is mediated by the technologies applied to it, then replacing conventional paper assessment techniques with more recent technologies of data collection and storage holds meaningful implications for how music faculty measure and track student progress. In this presentation, we demonstrate an innovative web-based survey program for the assessment of music students from audition through biannual performance juries. This program enables a broader view of qualitative aspects of students' musical growth and allows for quantitative insights about groups of students within studios, performance areas, and music schools as a whole. We next exhibit an e-Portfolio system that not only houses electronic artifacts but also facilitates teachers and students alike to reflect on student musical and academic progress. Finally, we discuss how institutional standards and artistic values can be refined and promoted through the use of these technologies.

Sussman, Richard; Hall, Richard; Riepe, Russell, James, Sandy
Panel Discussion on Incorporating Technology Into Student Performance Ensembles

This will be a panel discussion on the various ways in which technology can be incorporated with electronic, acoustic, and processed acoustic instruments, to create the next generation of student performance ensemble. The panel members will share success stories and challenges faced along the way. Special attention will be given to some of the practical, logistical, and creative challenges facing educators attempting to put together this type of ensemble. This will include a discussion of rehearsal techniques and getting student performers to think "outside the box" in order to use MIDI controllers and processed acoustic instruments in unconventional ways.

Theisen, Kathleen

Class Piano is Cool: The Ultimate High-Tech Class Piano Experience

If someone told you there was a way to make your music majors love keyboard harmony class while still maintaining the highest level of musicianship, what would you say? This workshop will show you how to use some of the most cutting-edge software to motivate your students and reinforce skills and concepts in a way that makes learning fun and makes the materials 'stick.' The presentation will demonstrate how to set up a MIDI keyboard lab utilizing digital pianos, computers and software such as Classroom Maestro, Home Concert Xtreme, Synthesia, Garage Band, Audacity, and Karaoke Player, as well as how to blend traditional teaching techniques with the use of MIDI files, recordings and other technology.

VanHandel, Leigh

Technology in the Music Theory Pedagogy Classroom: Incorporation and Results

This presentation reports on the role music technology and online instruction plays in a graduate-level music theory pedagogy course. In this class, students are expected to develop a level of fluency with online instruction elements, including learning management systems, tools for instruction, and notation programs, and to then use these skills to create online assessments aimed at undergraduates in the music theory core curriculum. In addition, this presentation will look at the meta-role that technology plays in this educational environment; students are simultaneously learning to use technological tools as well as implement them in a pedagogically useful and sound way, and are doing so through the use of the very technology they are studying. By experimenting with the technological elements and experiencing the results first-hand, they learn about educational best practices in online instruction and the use of technology in the music theory classroom.

Wallace, Justin

Performance: *Dogs Exist on a Different Time Plane*

The beginning and end of the piece represent the human time plane and show dogs as humans see them. The middle section, introduced by the ticking of a clock, represents the dog time plane, where everything is based on the number seven (because of dog years - i.e. one human year = seven dog years). The melodic motif of the dog section is a series of alternating notes that have a seventh interval between them (F, E flat, D flat, B (C flat), A, G). The time signature for the piece is 7/4, with a drum part that is first introduced in 7/8 before finally switching to 7/4 as well. Halfway into the section, the whole tone scale (F G A B D flat E flat F) is introduced, which has seven notes and is also the reverse of the first melodic motif. The title also has seven words.

Webster, Peter; Williams, David

Can We Abandon Print Resources in the Music Classroom? The Potential for eBooks, eTextbooks, Online Research Resources, and Bibliographic Software Tools in Music Academe.

The myriad options for electronically accessing print and research materials continues to offer options and challenges to music instruction. Will 2010 be the breakout year for the eBook? Will professors of all music disciplines (not just music technology) decide that paper-bound textbooks at the college bookstore are just too costly for students? Part I of this proposed two-part presentation will review the capabilities of these new alternatives to textbook delivery for college music courses. Part II will focus on electronic support for research, including distribution of scholarly journal articles, reference materials, links to bibliographic material, and the proliferation of community online research references like Wikipedia and Wiki-like spinoffs. Both sessions will provide opportunities for audience interaction through the use of response clickers on key issues and a handout with online references for both sessions.